

# Center for Advanced Infrastructure & Transportation Rutgers, The State University of New Jersey

## NJDOT Bureau of Research QUARTERLY PROGRESS REPORT

Project Title:	Empty Intermodal Container Management			
RFP NUMBER:		NJDOT RESEARCH PROJECT MANAGER:		
NJDOT 2003-31		Nazhat Aboobaker		
TASK ORDER NUMBER: Task Order No. 151 / 4-29174		PRINCIPAL INVESTIGATOR: Maria Boilé		
Project Starting Date: 3/1/2004 Project Ending Date: 3/1/2006		Period Covered: 2 <sup>nd</sup> Quarter 2005		

Task	% of Total	% of Task	% of Task to	% of Total
		this quarter	date	Complete
Literature review	10%	0%	100%	10%
1. Identification of root causes	15%	0%	100%	15%
2. Analysis of state-of-practice	15%	30%	100%	15%
3. Methodology	25%	30%	50%	12.5%
4. Policy guidelines, stakeholder strategies,	20%	-	=	=
operating and management measures				
5. Final report	15%	=	=	=
TOTAL	100%			52.5%

# Project Objectives:

The main objectives of the study are as follows:

- Review national and international literature to determine the root causes for the accumulation of
  empty containers. Trade journals will be reviewed and trade associations and port authorities will be
  contacted for an in-depth investigation of the causes of this problem.
- Determine the current state-of-practice in dealing with this problem. Alternative solutions including repositioning, cost-efficient potential reuse, recycling, disposal, secondary uses and IT assisted management will be examined. Emphasis will be given into keeping containers part of the transportation system.
- Propose a method for dealing with the empty container accumulation problem, which will be based
  on international experience and state-of-practice. This method will consider all stakeholders and will
  determine the optimal combination of alternative strategies for short-, medium- and long-term
  solutions.
- Recommend policy guidelines at federal and state level, and propose stakeholder strategies and operating and management measures to assist initiatives for keeping empty containers in the intermodal system.

### Project Abstract:

With the global container population approaching 16m TEU, and making some reasonable assumptions about shipping line and leasing company utilization, something in excess of 2.5m TEU of empty boxes are currently sitting in yards and depots around the world waiting for use. Storing containers is land-intensive, suffers from poor environmental credentials in terms of unsightly piles of containers, noise and road vehicle traffic and will never be a business with high levels of profitability. The purpose of this project is to study the causes of the empty container accumulation problem both world-wide and at a state level, review the state-of-practice and examine alternative solutions. This study aims to assist the NJ DOT to critically deal with the empty container accumulation problem in the state. The project will propose a method to deal with the problem in NJ and will suggest policy guidelines, stakeholder strategies, and operating and management measures.



#### 1. Progress this quarter by task:

<u>Task 2:</u> The review of current practice in dealing with empty container accumulation has been completed. <u>Task 3:</u> A methodological approach to the problem from a global, regional and local perspective has been formulated. A list of stakeholders in our region has been developed and some preliminary contacts have been made. Results of the discussions with these stakeholders are being reported and will be analyzed and evaluated once an adequate number of contacts have been made.

#### 2. Proposed activities for next quarter by task:

Additional contacts with regional stakeholders will be made. Results of the interviews will be summarized and reported. Preliminary work on policy guidelines, stakeholder strategies, and operating and management measures will be performed.

- 3. List of deliverables provided in this quarter by task (product date): Report on the work completed so far.
- 4. Progress on Implementation and Training Activities:
  None
- 5. Problems/Proposed Solutions:

None

Total Project Budget	\$72,282
Total Project Expenditure to date	\$49,256
% of Total Project Budget Expended	68%

<sup>\*</sup> These are approximate expended amounts for the project; these estimates are for reference only and should not be used for official accounting purposes. For a more accurate project accounting please review the quarterly invoice for this project.